



**NPS Rocky Mountain Network  
Vital Signs Objectives Workshop  
January 25, 26, and 27, 2005  
Flathead Lake Biological Station, MT  
Agenda and Approach**



**Overview and Goals of Meeting**

This 2.5 day workshop continues the process of identifying Vital Signs for the three Montana Rocky Mountain Parks.

Our general goals and expected products are:

1. *List of candidate Vital Signs for ROMN*
2. *Draft objectives for candidate Vital Signs in a standard format – ROMN Vital Signs Objectives database*
3. *Identify opportunities to integrate among Vital Signs to improve cost-effectiveness and usefulness of monitoring information*
4. *Estimate costs for monitoring candidate Vital Signs (likely very rough)*
5. *Prioritize candidate Vital Signs. A very general, first cut to guide ROMN in how to spend time on further developing candidate Vital Signs.*

**Logistics/travel information**

The workshop is being held at the Flathead Lake Biological Station (<http://www.umn.edu/biology/flbs/>). Kalispell airport is 40 mi. to the N, Missoula airport is 85 mi. to the S.

Lodging – dorm style rooms with two people per room (paid for by NPS). Communal bathrooms.

Check-in – When you arrive, please park in the visitor parking area (see map at the FLBS website). Go to the G.W. Prescott Conference Center dinging area where Mike, Brent, or Billy will meet participants as they arrive at the (see map on FLBS website). They will give participants keys direct them to their rooms. Note – Mike, Brent, and Billy will arrive at Flathead Lake mid-afternoon on January 24<sup>th</sup> and stay at the Conf. Center until everyone has arrived. For anyone arriving late – they will arrange to get a key to them and direct them to their room – please let Mike know if you are arriving late.

Meals – provided in the FLBS cafeteria on Tues., Wed., and Thurs. and paid for by NPS. Schedule: breakfast (serving from 7:30 – 8:00 AM), lunch (serving from 12:30 – 1:00 PM [except on Thursday when lunch will be served from 11:30-12:00]), dinner (serving from 6:00 – 6:30 PM). No dinner on Thurs.

**Note** – dinner is not being served Monday January 24<sup>th</sup> so please eat before you get in (or bring food).

Alcohol – bring your own except beer and wine will be provided for the social on Tuesday.

No pets allowed please.

We will coordinate carpooling from Missoula and Kalispell – after you know your arrival and departure time, please let Mike Britten ([mike\\_britten@nps.gov](mailto:mike_britten@nps.gov)) know.

**Reimbursement**

Rocky Mountain Network and NPS are paying for the Workshop. Lodging and meals at the Biological Station are covered – participants don't need to worry about those. The Network will pay for travel to and from the Workshop. For non-NPS participants, please arrange and pay for your own travel. USGS participants wishing to be reimbursed for travel to and from the BioStation should contact Gay Shockley for information on arranging travel. After you have completed the trip, send a simple invoice for travel costs including your name, address and phone contact information, SSN, and the amount for to Gay Shockley, NPS-IMR-NR, 12795 W. Alameda Parkway, Lakewood, CO 80228. Please include the wording: "professional services for the Rocky Mountain Network" in the invoice.



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**DRAFT** Agenda

| Tuesday January 25 <sup>th</sup> |  |  |
|----------------------------------|--|--|
| 8:30 – 9:00                      | Workshop goals, objectives, expected products, and process           | Tonnessen                              |
| 9:00 – 10:00                     | Introduction to FLBS and Perspectives on Aquatic Monitoring          | Stanford                               |
| 10:00 - 10:15                    | Review NPS/ROMN Vital Signs program and planning process             | Britten                                |
| 10:15 - 10:30                    | Break  |  |
| 10:30 - 11:00                    | Vital Signs; implementation in ROMN                                  | Britten                                |
| 11:00 - 11:45                    | Park Settings and Desired Future Conditions                          | Bobowski, Stops, Potter (15 min. each) |
| 11:45 - 12:30                    | Conceptual Models and Vital Sign Objectives and Evaluation Criteria  | Schweiger                              |
| 12:30 - 1:30                     | Lunch in cafeteria (provided)  |  |
| 1:30 – 1:45                      | Vital Signs database – using the database in workgroups              | Frakes                                 |
| 1:45 – 4:30                      | Workgroup breakouts to develop Vital Signs objectives and evaluation | Workgroups                             |
| 4:30 – 5:00                      | Workgroup progress reports   | Workgroup leaders                      |
| 5:00 – 6:00                      | Social (Conference Center/dining facility)                           |  |
| 6:00 – 6:30                      | Dinner   |  |
| 7:00 – 9:00                      | Social, continued  |  |

| Wednesday January 26 <sup>th</sup> |  |                        |
|------------------------------------|--|------------------------|
| 8:30 – 10:30                       | Workgroup breakouts cont.  | Workgroups             |
| 10:30 – 11:00                      | Break  |                        |
| 11:00 – 12:30                      | Workgroup breakouts cont.  | Workgroups             |
| 12:30 – 1:30                       | Lunch in cafeteria (provided)  |                        |
| 1:30 – 3:30                        | Workgroup reports: candidate Vital Signs described and priorities (with comments from group) | Workgroup participants |
| 3:30 – 4:00                        | Break  |                        |
| 4:00 – 5:00                        | Workgroup breakouts  |                        |

| Thursday January 27 <sup>th</sup> |   |                   |
|-----------------------------------|---|-------------------|
| 8:30 – 9:00                       | Candidate Vital Signs; Within and Across group lists  | Frakes            |
| 9:00 – 10:30                      | Integrating among Vital Signs; summary and discussion | Tonnessen         |
| 10:30 – 11:00                     | Break   |                   |
| 11:00 – 11:15                     | Workshop evaluation and suggestions for Co. workshop  |                   |
| 11:15 – 11:30                     | Wrap-up and next steps                                | Tonnessen/Britten |
| 11:30 – 12:00                     | Lunch   |                   |



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**Materials**

The following materials will be available on the ROMN website  
(<http://www1.nature.nps.gov/im/units/romn/Pages/VitalSignsWorkShop.htm>)  
or will be provided at the beginning of the workshop:

- 1) Agenda
- 2) ROMN Phase 1 Draft Report (one copy per workgroup, also available on workgroup computers)
- 3) Presentation Handouts
- 4) VS Nomination form (includes VS framework and list)
- 5) Workshop Logistics

**Participants and Suggested Workgroup Structure**

| <u>First</u> | <u>Last</u>  | <u>Agency/org.</u>   | <u>Possible Workgroup</u>   |
|--------------|--------------|--|-----------------------------|
| Don          | Campbell     | USGS-WRD   | Air, Climate, Eco Processes |
| Dan          | Fagre        | USGS-BRD-Glacier Field Station   | Air, Climate, Eco Processes |
| Brent        | Frakes       | NPS-Rocky Mountain Network   | Air, Climate, Eco Processes |
| Andy         | Hansen       | MSU and ROMN Science Panel   | Air, Climate, Eco Processes |
| Art          | McKee        | FLBS   | Air, Climate, Eco Processes |
| Kathy        | Tonnessen    | NPS - RM CESU and ROMN Tech. Comm. and Board of Directors              | Air, Climate, Eco Processes |
| Leigh        | Welling      | NPS - Crown of Continent Research Learning Center and ROMN Tech. Comm. | Air, Climate, Eco Processes |
| Mark         | Williams     | CU-Boulder and ROMN Science Panel                                      | Air, Climate, Eco Processes |
| Bob          | Bramblett    | USFS   | Aquatic                     |
| Bonnie       | Ellis        | FLBS   | Aquatic                     |
| Paul         | Hansen       | Bitterroot Consulting  | Aquatic                     |
| Alisa        | Mast         | USGS-WRD   | Aquatic                     |
| Christina    | Relyea       | FLBS   | Aquatic                     |
| Billy        | Schweiger    | NPS-Rocky Mountain Network   | Aquatic                     |
| Jack         | Stanford     | FLBS   | Aquatic                     |
| Bob          | Stottlemeyer | USGS-BRD-Fort Collins Science Center                                   | Aquatic                     |
| Ben          | Bobowski     | NPS – Grant-Kohrs Ranch NHS and ROMN Tech. Comm.                       | Terrestrial                 |
| Jane         | Bock         | CU-Boulder   | Terrestrial                 |
| Tara         | Carolyn      | NPS-Glacier NP   | Terrestrial                 |
| Cathie       | Jean         | NPS-Greater Yellowstone Network  | Terrestrial                 |
| Bob          | Keane        | USFS-Fire Sci. Lab   | Terrestrial                 |
| Carl         | Key          | USGS-BRD-Glacier Field Station   | Terrestrial                 |
| Dan          | Manier       | CSU-ROMN Research Assoc. and Rocky Mountain Network                    | Terrestrial                 |
| Cyndi        | Smith        | Parks Canada-Waterton NP   | Terrestrial                 |
| Steve        | Gniadek      | NPS-Glacier NP   | Wildlife                    |
| Carl         | Bock         | CU-Boulder   | Wildlife                    |
| Mike         | Britten      | NPS-Rocky Mountain Network   | Wildlife                    |
| Steve        | Corn         | USGS-BRD-Aldo Leopold Inst.  | Wildlife                    |
| Kim          | Keating      | USGS-BRD-Rocky Mountain Science Center                                 | Wildlife                    |
| Jack         | Potter       | NPS-Glacier NP and Tech. Comm.   | Wildlife                    |
| John         | Waller       | NPS-Glacier NP   | Wildlife                    |
| Gerry        | Wright       | Univ. of Idaho and Rocky Mountain Network Science Panel                | Wildlife                    |